

ABSTRACT

METHOD FOR DETECTING A SIGNAL AND RECEIVER SYSTEM FOR THE IMPLEMENTATION OF THE METHOD

The method seeks a high-performance detection of a signal burst transmitted on the initiative of a sender on a radio channel listened to by a receiver system. The transmitted burst represents a predetermined digital sequence, serving for example to request access to a radio system or to ensure the synchronization of a radio interface. Channel parameters representing a statistical behavior of the radio channel are estimated and a detection magnitude is evaluated on the basis of the estimated channel parameters and of a correlation between a signal received at the receiver system and the predetermined digital sequence. The estimated channel parameters comprise moments of order greater than 2 of the gain on the radio channel.